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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,370	02/10/2004	Alazel Acheson	MSFT-3026 / 307009.01	3201

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WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION)
ONE LIBERTY PLACE - 46TH FLOOR
PHILADELPHIA, PA 19103

EXAMINER

PANNALA, SATHYANARAYA R

ART UNIT	PAPER NUMBER
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2164

DATE MAILED: 09/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/776,370

Applicant(s)

ACHESON ET AL.

Examiner

Sathyanarayan Pannala

Art Unit

2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/9/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Application No. 10/776370 filed on 2/10/2004 has been examined. In this Office Action, claims 1-30 are pending.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 9/9/2005 is in compliance with the provisions of 37 CFR 1.97 and has been considered by the examiner.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
4. Claims 3, 13 and 23 are rejected under 35 U.S.C. 112, second paragraph, because the claim recites the limitation "enabling DBMS to execute .NET managed code" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-30 are rejected under 35 U.S.C. § 101, because none of the claims are directed to statutory subject matter. Independent claims 1, 11 and 21 deals with simple abstract ideas. A claim that recites a computer that solely calculates a mathematical formula or a computer disk that solely stores a mathematical formula is not directed to the type of statutory subject matter eligible for patent protection. The claims are not producing useful, concrete and tangible results. See *Diehr*, 450 U.S. at 186 and *Gottschalk v. Benson*, 409 U.S. 63, 71-72 (1972).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates

of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-2, 4-12, 14-22 and 24-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pastor (US Patent 6,681,383) hereinafter Pastor, and in view of Harris (USPA Pub. 2002/0059204 A1) hereinafter Harris.

9. As per independent claims 1, 11 and 21, Pastor teaches an automated software production tool, software, and methodology. In which a graphical user interface is presented to allow a user to input unambiguous formal requirements for the software application. Based on the formal requirements input for the software application, a formal specification for the software application is produced and validated, from which the software application is generated. By generating the software application directly from an unambiguous, validated formal specification, the software developer can avoid the programming errors associated with conventional programming languages, and instead work directly in the problem space (col. 3, lines 51-62). Pastor teaches the claimed, enabling said DBMS to execute .NET managed code (Examiner interpreted .NET is based on Visual Basic VB) (Fig. 2, col. 7, lines 50-51 and 58-59). Pastor teaches the claimed, writing said application code as .NET managed code (Fig. 2, col. 7, lines 51-55). Pastor does not explicitly teach transmitting the code and executing on DBMS. However, Harris teaches the claimed, transmitting said code from an application to said DBMS (page 8, paragraph [0074]). Harris teaches the claimed,

executing said code on said DBMS (page 6, paragraph [0062]). Thus, it would have been obvious to one of ordinary skill in the data processing art at the time of the invention, to have combined the teachings of the cited references because Harris' teachings would have allowed Pastor's method to Supplier networks may dynamically access information from relevant suppliers in the response to the buyer's requirements and present only the suppliers and products that precisely meet the consumer's needs (page 1, paragraph [0006]).

10. As per dependent claims 2, 12 and 22, Pastor and Harris combined teaches claim 1. Harris teaches the claimed, after executing said code on said DBMS, returning a value from said DBMS to said application (page 6, paragraph [0062]). Thus, it would have been obvious to one of ordinary skill in the data processing art at the time of the invention, to have combined the teachings of the cited references because Harris' teachings would have allowed Pastor's method to Supplier networks may dynamically access information from relevant suppliers in the response to the buyer's requirements and present only the suppliers and products that precisely meet the consumer's needs (page 1, paragraph [0006]).

11. As per dependent claims 4, 14 and 24, Pastor teaches the claimed, before the step of executing said code on said DBMS, said DBMS receiving an invocation context from the application, and executing said code based on said invocation context (col. 34, lines 30-32).

12. As per dependent claims 5, 15, 25, Pastor teaches the claimed, before the step of executing said code, said DBMS separating said code into an immutable part and a mutable part and, and executing said code based on the results of said operation of separating (Fig. 4, page 6, paragraph [0062]).

13. As per dependent claims 6, 16, 26, Pastor teaches the claimed, providing a cursor on any type of query executed (Fig. 1, col. 5, lines 32-33).

14. As per dependent claims 7, 17, 27, Pastor teaches the claimed, a programming model for said application is symmetrical with a programming model for said DBMS (Fig. 1, col. 5, lines 11-16).

15. As per dependent claims 8, 18, 28, Pastor teaches the claimed, the marshaling of data between an unmanaged layer and a managed layer (col. 39, lines 26-29).

16. As per dependent claims 9, 19, 29, Pastor teaches the claimed, an application operation from a group of operations comprising functions, procedures, and triggers is executed directly in the RDBMS (col. 34, lines 32-35).

17. As per dependent claims 10, 20, 30, Pastor teaches the claimed, a result is returned by said DBMS to said application based on the execution of said application operation by said DBMS (Fig. 2, col. 7, lines 52-59).

18. Claims 3, 13 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pastor (US Patent 6,681,383) hereinafter Pastor, in view of Harris (USPA Pub. 2002/0059204 A1) hereinafter Harris, and in view of Woodring (US Patent 7,020,660) hereinafter Woodring.

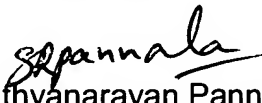
19. As per dependent claims 3, 13 and 23, Pastor and Harris do not explicitly teach using ADO. However, Woodring teaches the claimed, the step of enabling said DBMS to execute .NET managed code is through the utilization of an ADO.net in-process provider (or its equivalent) (Fig. 3, col. 3, lines 49-56). Thus, it would have been obvious to one of ordinary skill in the data processing art at the time of the invention, to have combined the teachings of the cited references because Harris' teachings would have allowed Pastor's method to eliminate the application software code customization based on a low level DBMS application programming interface (API) and the specific DBMS being accessed. (col. 1, lines 28-31).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sathyanarayan Pannala whose telephone number is (571) 272-4115. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Sathyanarayan Pannala
Examiner

srp
September 5, 2006